

Procedure: <i>Software Development Plan (SDP)</i>	
Issue Date: August 11, 2000	Standard ID: <i>S-PE-020</i>
Supersedes: Initial Release	Rev/Change: 1.0

1. Purpose: To establish the methods/procedures to be used, the approach to be followed and the project schedule, organization and resources.

2. Creating Procedures:

P-PE-030 – Detailed Planning

3. Contents:

The recommended information required in a SDP is outlined below:

- a) Title Page. See S-GP-010
- b) Table of Content
- c) (1.0) Project Description
- d) (1.1) Identification. Provides full identification of the system and the software including, as applicable identification number(s), title(s) and version number(s)
- e) (1.2) System Overview. States the purpose of the system and the software including the general nature of the system and the software: the history of the system development, operation and maintenance; the Customer and End User.
- f) (1.3) Document Overview Summarizes the purpose and contents of the document.
- g) (1.4) Relationship to other documents.
- h) (2.0) Project Team and Organization. Defines the Project Team, organizational interfaces, top-level roles and responsibilities (not necessarily names of the people with those roles)
- i) (3.0) Overall Project Requirements. Defines the high-level project requirements. (It is understood that requirements change over the course of the project, and that all task requirements may not be known at the time of the writing an SDP.)
- j) (4.0) Technical Approach.
- k) (4.1) Technical Data Package. Lists the products such as software, documents, etc., that are to be developed by this project and included in the Technical Data Package. Describes the delivery mechanism.
- l) (4.2) Overview of the Major Tasks to be Accomplished. Define the project's major subtasks and elements.
- m) (4.3) Facilities/Resources. Describes the facility, lab and space requirements, and other resource needs. Define the date by which the development environment is to be completed.
- n) (4.4) Project Software Development Process. Describes the software development process to be used by the project.
- o) (4.5) Baseline Estimates.
- p) (4.5.1) Critical Computer Resources. Identify the product (or target) critical computer resources, and based on project requirements the estimated utilization. See S-PE-270 and S-PE-272.

- q) (4.5.2) Product Size. The software estimates for the project. See P-PE-170.
- r) (4.5.3) Project Effort. The Effort estimates and staffing plan for the project. See P-PE-175.
- s) (4.5.4) Project Duration. The duration estimates for the project. See P-PE-180.
- t) (4.6) Software Configuration Management. Included if a separate Software Configuration Management Plan is not written. See S-CM-030.
- u) (4.7) Software Quality Assurance. Included if a separate Software Quality Program Plan is not written. See S-QA-030.
- v) (4.8) Software Engineering Elements.
- w) (4.8.1) Procedures and Standards. Lists the documented procedures and standards to be followed by the project.
- x) (4.8.2) Programming Languages. Lists the programming languages to be implemented during the project's life cycle.
- y) (4.8.2.2) Coding Guidelines. List any applicable coding guidelines.
- z) (4.8.3) CASE Tools. Lists any tools that will support the project development and a brief description of their purpose.
- aa) (4.8.4) Development Methodologies and Techniques. Describes the engineering methodologies and techniques to be implemented for development (e.g. Object Oriented, Structured).
- bb) (4.8.5) Life Cycle Selection. Defines the life cycle model. See S-PM-150.
- cc) (4.8.6) Acceptance Criteria. Defines the criteria for determining when the product is ready to be delivered.
- dd) (4.9) Software Testing. Describes the test planning and execution activities for the project to include informal and formal testing.
- ee) (4.10) Metrics. Defines the key measures and metrics collection for the project.
- ff) (5.0) Peer Reviews. Identifies the Peer Reviews planned for the project, indicating the points in the process they will be performed and the estimated hours to conduct the Peer Reviews.
- gg) (6.0) Project Training. Included if a separate Project Training Plan is not written. Identifies the training needs for the project and the approach for obtaining the project's required training on both organizational and project requirements.
- hh) (7.0) Fielding. Defines the approach for delivering and installing software and services at the designated sites.
- ii) (8.0) Overall Schedule. Provides the software development schedule for the project including major milestones and final delivery information.
- jj) (9.0) Risk Management. Included if a Separate Risk Management Plan is not written. Identify any known risks and potential risks, plus corresponding strategies for mitigating risks. See S-PE-151 and S-PE-152.
- kk) (10.0) Project Management, Tracking and Monitoring. Defines the approach to be followed in providing ongoing project tracking and control. Includes the plans for Project Team routine status meetings, action item tracking, internal reviews, and major milestones reviews. See P-PM-150; P-PM-170; P-PM-180.
- ll) (11.0) Process and Quality Management. Provides the project's approach for performing process management and quality management.

- mm) (11.1) Goals Lists the project's goals for the process and quality performance of the project/build. The project goals are aligned with the organizational measurements program.
- nn) (11.2) Plan. Identifies the project's plan, schedule and approach to be used to attain and revise the process and quality goals and activities.
- oo) (11.3) Methods. Provides the strategy/method(s)/technique(s) which will be used to track the project actual performance against the project goals.
- pp) (11.4) Adjustment Guidance. Identifies the project's guidelines for making adjustments (e.g. changing the project's defined software process, modifying goals) based on the actual performance data.
- qq) (11.5) Acronym List. Provides a list of all acronyms used in the document along with the associated definitions.

4. Format:

Project Manager Specified

5. Notes: N/A